

Banco de La Concepción: A new Natura 2000 Marine Site off Canary Islands

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Abstract

The main objective of the LIFE+ INDEMARES project is to contribute to the protection and sustainable use of the biodiversity in the Spanish seas through the identification of valuable areas for the Natura 2000 Network. The Spanish Institute of Oceanography (IEO) has been in charge of implementing scientific surveys to map sensitive habitats of seven of the ten INDEMARES areas, and to determine the fisheries footprint over these areas.

Banco de La Concepción is one of the areas chosen to be depicted in the frame of INDEMARES project. Located at 71 km to the NE of Lanzarote, at the coordinates 29° 55' Latitude N and 12° 45' Longitude W, Banco de la Concepción raises from 2,541 m up to its summit at 170 m deep.

The biological richness of Banco de la Concepción is very influenced by the deep water up-welling phenomena, which create a high productivity, attracting a multitude of pelagic species, such as cetaceans, turtles, sharks, and tunas looking for food. In its vicinity, fishery resources such as goraz, anglerfish, and hakes, are abundant, and a rich invertebrate fauna cohabits in their bottoms. Banco de la Concepción is a traditional fishing area of oceanic pelagic species, and very good to catch demersal fish; it is highly visited by Galician and Portuguese drifters and long liners that fish in Mauritania, and mainly by the Andalusian longliners. In general, its main impacts are related to uncontrolled fishing pressure. The available information on the anthropogenic impact of the area was scarce, and its level of research was very poor as well, before INDEMARES project.

Methodology approach complies with a multidisciplinary perspective, having described the area from geological, oceanographic, biological and fisheries points of view. Several surveys have taken place since 2009 to 2013 at Banco de La Concepción waters. Traps, longlines, beam trawls, benthic dredges and box corers have been used to sample benthic fauna. These last two, plus EM 3002 multibeam echosounder, PS 18 parametric sub bottom profiler, EA600 monobeam sounder, Seapath 200 positioning sensor and SV Plus sound velocity calibration sensor were used to make a geophysical study which provides a range of environmental factors. CTD was used to depict physical conditions of the water column. Finally, Remote Operated Vehicle Liropus 2000 and different photogrammetric tugged sleds were used to make a great effort of visual sampling.

Data from VMS (Vessel Monitoring System) were used, combined with interviews to users (fishers), to describe the fishery uses in the area.

Results from all this field work provide enough information for the administrations to establish a new Natura 2000 area, trying to reconcile protection of biodiversity and artisanal local economic activities. This establishment should take place at the end of a process of public consultation to stakeholders which is taking place in the present and which will help to shape the future Management Plan which will give details about permitted and prohibited uses.